

ABSTRACT

The present invention relates to a power drill chuck, which includes a drill body, a nut, jaws, a front sleeve, a rear sleeve, a nut sleeve, a rolling body. Said three jaws are mounted in three inclined holes, which are trisection of said drill body. The nut thread constitutes the thread drive together with the thread of said jaws mounted in said three inclined holes of said drill body. Said front sleeve is connected with said drill body, and said nut sleeve fixed by connection with said nut extends backwards, whose rear end portion a plurality of projecting keys are provided in. Said rear sleeve is mounted around the rear of said nut sleeve and may rotate relative to said nut sleeve and drill body. There provided some piecewise annular holes in rear end face of said rear sleeve and a plurality of keys on the inner end face. A positioning sleeve fixed by connection with the rear portion of said drill body may position axially the said rear sleeve on the drill body. A plurality of elastic impact members is mounted between said nut sleeve and said rear sleeve. Said elastic impact members are provided with a plurality of deformation portions and a plurality of projecting keys. A location ring in accordance with the present invention is provided in the rear sleeve and rear portion of said drill body. There are some connection keys and connection holes on the location ring. According to the present invention, the art scheme is suitable for all kinds of clamping of drilling tool, which has a powered clamping function, so as to improve the gripping power for handle of the tool.

(Fig. 1)